Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ TP: \_\_\_\_\_\_\_

HW#31H: Conditional Statements + Review

Honors Geometry

Due Date: Thursday, Nov. 6th, 2014

**Failure to write in complete sentences and show all work will result in LaSalle!**

**Rewrite the conditional statements in if-then form.**

|  |  |
| --- | --- |
| 1) The measure of a straight angle is 180°.  **HYPOTHESIS:   CONCLUSION:**  **IF-THEN FORM:** | 2) Congruent segments are segments that are equal in measure.  **HYPOTHESIS:**  **CONCLUSION:**  **IF-THEN FORM:** |
| 3) Today is Monday if yesterday was Sunday.  **HYPOTHESIS:**  **CONCLUSION:**  **IF-THEN FORM:** | 4) A number is divisible by 4 if it is divisible by 8.  **HYPOTHESIS:**  **CONCLUSION:**  **IF-THEN FORM:** |

**5) Points that lie on the same line are called collinear points.** Rewrite the statement in conditional form.

|  |  |
| --- | --- |
| **Conditional Statement** |  |

Prove the statement to be true or false with an example.

**Determine if the statement uses inductive or deductive reasoning. Explain why.**

6) Muchin has had college t-shirt day for four Fridays in a row. Therefore, Muchin will have college t-shirt day next Friday.

7) A regular pentagon has a side length of 5 cm. The sum of all lengths is 25 cm.

|  |  |
| --- | --- |
| 8) Simplify: | 9) Write the following in scientific notation:  a. b. |



|  |  |
| --- | --- |
| 9)  **Cats**  **Pets**  **Dogs** | Write a true and a false conditional statement based off the venn diagram.  True:  False: |